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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/599,118	09/20/2006	Jun Masuda	351917-000003	4453
47604	7590	07/22/2009	EXAMINER	
DLA PIPER LLP US P. O. BOX 2758 RESTON, VA 20195			SAVAGE, JASON L	
			ART UNIT	PAPER NUMBER
			1794	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/599,118	Applicant(s) MASUDA ET AL.	
	Examiner JASON L. SAVAGE	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-5 and 7-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-5 and 7-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20090706</u> . | 6) <input type="checkbox"/> Other: _____ |

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7-6-09 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 3-5 and 7-13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The limitation in independent claims 1, 5 and 10 that the titanium carbide are bonded only to the surface of the Ni alloy layer is considered new matter. Although the figures depict titanium carbide particles adhered to the surface of the Ni layer as claimed, there is no teaching or suggesting in the Application as originally filed to exclude embodiments wherein titanium carbide particles may be contained in portions

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of the part which aren't on the surface of the Ni alloy layer such as being embedded within the alloy layer.

While it is noted that Applicant recites that it is undesirable if the TiC particles become entirely covered with molten Ni in a heating process on page 6, lines 8-17 of the specification, there is no teaching or suggestion that no particles are to become entirely covered. The portion cited by Applicant merely appears to emphasize the notion that the particles should partially protrude from the surface of the Ni alloy, not that all particles must protrude from the surface.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 3-5 and 7-13 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1-10 of copending

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Application No. 11/565,771. Although the conflicting claims are not identical, they are not patentably distinct from each other because Application'771 recites a composite material for a die casting machine part comprising a steel pipe base, a Ni alloy layer formed on the steel base, and titanium carbide particles bonded to the surface of the Ni alloy layer (claim 1). Regarding the limitation that the titanium carbide particles are densely bonded and only to the surface of the Ni alloy layer, the claimed component of Application'771 would be considered to meet the claim limitations. Regarding the limitation in the claims that the casting metal is to be molten aluminum, it would have been obvious to have used the claimed composite material for die casting for a variety of materials including aluminum with a reasonable expectation of success.

Regarding claims the claim limitations in claims 1, 5 and dependent claims 3-4 and 7-8, Application'771 recites the same claim limitations such as the TiC particles are not fully covered, gaps between the particles are filled with the claimed fine ceramic materials and the Ni alloy is the same composition as claimed (claims 2-4).

Regarding claim 9, Application'771 recites the composite material may be used as a sleeve part (claim 1).

Regarding claims 10-11, Application'771 recites the same limitations of forming the contact member including forming Ni alloy layer on steel base, burying the contact member body in TiC powder, vacuum heating to bond the powder and Ni layer, subsequently applying a slurry of ceramics (claims 8-9).

Regarding claim 12, Application'771 recites a TiC particle size between 10 to 500 microns. However, where the only difference between a claim and the prior art is one of

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relative dimensional differences and there is no showing that the claimed device and the prior art would perform any differently, the claimed device is not patentably distinct from the prior art. *Gardner v. TEC System, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984).

Regarding claim 13, Application'771 does not claim the Ni alloy layer is formed by thermal spraying, however it would have been obvious to deposit the claimed layer by any conventional deposition process including thermal spraying with a reasonable expectation of success.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Arguments

Applicant's arguments with respect to claims 1, 3-5 and 7-13 have been considered but are moot in view of the new ground(s) of rejection.

In light of the amendment to the claims adding the limitation that the titanium carbide particles are bonded only to the surface of the Ni alloy layer has overcome the rejections in view of the cited art in the prior Office Action. However, the limitation which overcame the prior art that the particles are only bonded to the surface is considered new matter. Should Applicant remove the limitation of only, the prior art rejections would be reinstated with respect to claims 1, 3-5 and 7-9.

However, in light of Applicant's arguments and evidence such as provided in the figures and in particular figure 5, claims 10-13 drawn to the recited method of forming

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the claimed contact member would be considered distinct and unobvious in view of the cited art. Furthermore, incorporating the limitations of the cited method could also help distinguish the claimed article over the prior art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON L. SAVAGE whose telephone number is (571)272-1542. The examiner can normally be reached on M-F 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on 571-272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jason Savage/
Examiner
7-20-09

/JENNIFER MCNEIL/
Supervisory Patent Examiner, Art Unit 1794